BRAUN, M.P., doktor tekhn. nauk; MIROVSKIY, E.I., inzh.; LEVITANUS, A.D.,
kand. tekhn. nauk; KARAMZIN, E.I., inzh.; SLAVIN, B.A., inzh.

Using low-nickel and nickelless steels for pinions of tractor
transmissions. Mashinostroenie no.2:85-87 Mr-Ap '65.

(MIRA 18:6)

BERG, S.L., polkovnik; VOROB'YEV, V.I., kapitan pervogo ranga; GIL'BO,
  G.M., kapitan pervogo ranga; ANANCHENKO, A.A.; BALAKSHINA, M.M.;
  BANNIKOV, B.S., kapitan vtorogo ranga; BAKHTINA, G.F.; BERENSHTAM,
  N.V.; BUTYRINA, N.Ya.; VOROB'YEV, V.I., kapitan pervogo ranga;
  GASS, I.P.; GINBYSH, N.S.; GLADIN, D.F., polkovnik; GOLOVANOVA, L.G.,
  kand. ist. nauk; GOLUBEVA, Z.D., kand. filol. nauk; GONCHAROVA, A.I.;
  ZANADVOROVA, R.N.; IVANOVA, N.G.; KARAMZIN, G.B.; KOVAL'CHUK, A.S.;
  KRONIDOVA, V.A.; LITOVA, Ye.I.; MOLCHANOVA, T.I.; OKUN', L.S.;
  POCHEBUT, A.N.; RAYTSES, V.I.; SAVINOVA, G.N.; SENICHKINA, T.I.;
  SKRYNNIKOV, R.G., kand. ist. nauk; FURAYEVA, I.I.; CHIZHOVA, N.N.;
  YASINSKAYA, L.F.; GLADIN, D.F., polkovnik; LABETSKIY, Ye.F., pod-
  polkovnik; LEBEDEV, S.M., kapitan pervogo ranga; ORDYNSKIY, N.I.,
  kapitan pervogo ranga; NADVODSKIY, V.Ye., podpolkovnik; DEMIN, L.A.,
  inzh.-kontr-admiral, glav. red.; FRUMKIN, N.S., polkovnik, zam. otv.
  red.; LEVCHENKO, G.I., admiral, red.; BAKHTINA, G.F., tekhn. red.

[Naval atlas] Morskoi atlas. n.p.   Izd. Glavnogo Shtaba Voenno-
Morskogo Flota. Vol.3. [Naval history] Voenno-istoricheskii.
Pt.1. [Text for the maps] Opisaniia k kartam. 1959. xxii, 1942 p.
                                              (MIRA 15:5)
1. Russia (1923- U.S.S.R.) Ministerstvo oborony.
              (Naval history)

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 4, p 78 (USSR)

SOV/124-57-4-4403

AUTHORS: Nagiyev, M. F., Karamzin, P. V.

TITLE: Development of a Method for the Compilation and Correlation of Experimental Data on the Heat Transfer in Heat Exchangers Having Odd-shaped Spaces Downstream of the Tubes, and Its Practical Application (Razrabotka metoda obobshcheniya eksperimental'nykh dannykh po teploperedache v apparatakh so slozhnym zatrubnym prostranstvom i yego prakticheskoye primeneniye)

PERIODICAL: Izv. AN AzerbSSR, 1956, Nr 4, pp 33-46

ABSTRACT: Bibliographic entry

Card 1/1

NAGIYEV, M.F.; KARAMZIN, P.V.

New classification of heat-exchanging apparatus and a systematic
arrangement of experimental factors of heat transfer. Izv.AN Azerb.
SSR no.8:61-71 Ag '56.   (MLRA 9:11)
                        (Heat exchangers)

KARAMZIN P.V.

HARAMZIN, P.V.

NAGIYEV, M.F.; KARAMZIN, P.V,

Operational efficiency of heat exchangers with annular diaphragmatic
space. Dokl. AN Azerb. SSR 12 no.11:811-817 '56.   (MIRA 10:3)

1. Institut nefti AN Azerbaydzhanskcy SSR.
            (Heat exchangers)

KARAMZIN, P.V. Doc Cand Tech Sci -- (diss) "Study of the process
of heat transfer in the heat-exchanger with the circular dia-
phragmatic space." Baku, 1957. 24 pp with graphs 20 cm. (Aca-
demy of Sciences Az SSR. Petroleum Inst), 100 copies
(KL, 21-57, 102)

-55-

SOV/124-58-1-776

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 1, p 99 (USSR)

AUTHORS: Nagiyev, M. F., Karamzin, P. V.

TITLE: Experimental Study of the Heat-transfer Process in a Heat Exchanger
            Having an Annular Working Space Subdivided by Cylindrical Diaphragms
            (Eksperimental'noye izucheniye protsessa teploperedachi v teploobmen-
            nom apparate s kol'tsevym diafragmirovannym prostranstvom)

PERIODICAL: Izv. AN AzerbSSR, 1957, Nr 2, pp 23-35

ABSTRACT: The authors propose a method for the intensification of the heat
            transfer in a concentric-tube heat exchanger by setting up annular
            diaphragms on the inner surface of the outer tube. At the location of
            the diaphragm the liquid flows between the external surface of the
            inner tube and the opening of the diaphragm. A test setup and test
            results are described for the case of the heat transfer in such a heat
            exchanger with water. It is established that the total heat-transfer
            coefficient is multiplied by 3 to 5 times. From the analysis of the
            tables adduced it is apparent that the heat-transfer coefficient
            increases with increasing size of the opening in the diaphragm only
Card 1/2   up to a definite limit, beyond which a further enlargement of the

SOV/124-58-1-776

Experimental Study of the Heat-transfer Process in a Heat Exchanger (cont.)

diameter of the diaphragm leads to a reduction of the heat-transfer coefficient. The paper merely states the fact of the existence of a critical section of the diaphragm.

V. N. Bogin

Card 2/2

KARAMZIN, P.V.

124-58-6-6772

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 6, p 69 (USSR)

AUTHORS: Nagiyev, M. F. , Karamzin, P. V.

TITLE: Determination of the Heat Transfer Coefficient of a Flow in a
           Tubular Space in a Transitional Hydrodynamic Regime (Opre-
           deleniye koeffitsiyenta teplootdachi potoka trubnogo prostranstva
           pri perekhodnom gidrodinamicheskom rezhime)

ABSTRACT: A method of calculation of the Nusselt number, proposed by
           the authors, is described for a longitudinal flow along the sur-
           face of pipes in a transitional hydrodynamic regime. The
           authors consider "transitional" a flow characterized by values
           of the Reynolds number, R, in the range between 2,320 and
           10,000. The proposed method is based on the assumption that
           within the abovedefined range of values of the R number a
           perturbation of the stability of the laminar flow does not affect
           the entire volume of the core of the flow. In connection there-
           with the authors allow the coexistence of regions of laminar and
           turbulent flow within the core of the flow. It is proposed that
           the Nusselt number for the transitional conditions be determined

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124-58-6-6772

Determination of the Heat Transfer Coefficient of a Flow (cont.)

as the sum of: $N'_1 = LN_{11} + TN_{1t}$. Here N'_1 is the Nusselt criterion at $R = 2,320 - 10,000$; N_{11} is the same quantity for laminar flow at $R = 2,320$; N_{1t} is the same quantity for turbulent flow at $R = 10,000$; the coefficients L and T characterize the distribution of the laminar and the turbulent flow regimes within the flow. The coefficients L and T are considered to be linear functions of the Reynolds number, R, of the liquid flow in the transitional state. The results of experiments carried out by the authors with water are compared with the experimental results obtained by I. T. Alad'yev, M. A. Mikheyev, and O. S. Fedynskiy (Izv. AN SSSR, Otd. tekhn. n., 1951, Nr 1). The experiments described were carried out with small variations of temperature between the inlet and outlet sections of the working region of the flow. In the analysis of the test data, a linear law of temperature variation in the stream in the direction of the flow was used. The value of the Nusselt number satisfying the laminar conditions (N_{11}) was determined from the Zeeder and Tait formula, and that for the turbulent flow (N_{1t}) was obtained from Kraussold formula as corrected by M. A. Mikheyev. No description of the experimental method or of the experiments is given in the article. The experimental observations of the authors were analyzed according to the Card 2/3

124-58-6-6772

Determination of the Heat Transfer Coefficient of a Flow (cont.)

usual methods of computation based on the introduction of a correction co-
efficient into the formula used for determining the value of N when
R > 10,000. The values of the correction coefficient were taken by the
authors from the findings of V. M. Ramm Teploobmennyye apparaty (Heat
Exchangers) Goskhimizdat, 1948 . From the curve included in the article
it follows that the results of the experiments as calculated by the usual method
correlate better with the results of the experiments by Alad'yev, Mikheyev, and
Fedynskiy, than with those calculated by the method suggested by the authors.
The formulas contain typographical errors.

M. D. Vaysman

1. Fluid flow--Heat transfer
2. Hydrodynamics research

Card 3/3

KARAMZIN, P.V.

NAGIYEV, M.F.; KARAMZIN, P.V.

Experimental study of pressure losses during the flow of liquids in annular diaphragmatic space. Dokl. AN Azerb. SSR 13 no.8:847-852 '57.   (MIRA 10:9)

1. Institut nefti Akademii nauk Azerbaydzhanskoy SSR.
                        (Heat exchangers)

KARAMZIN, P. V.

20-3-43/59

AUTHORS: Nagiyev, M.F., Member of the Academy of Sciences of the Azerbaydzhan, SSR, Shakhtakhtinskiy, T.N., Karamzin, P.V.

TITLE: Development of the Theory of Recirculation Processes (Razvitiye teorii retsirkulyatsionnykh protsessov)

PERIODICAL: Doklady Akad.Nauk SSSR, 1957, Vol. 115, Nr 3, pp.576-579 (USSR)

ABSTRACT: The method of calculation proposed here develops the theory of recirculation and makes possible an evaluation of the efficiency of an arbitrary complex chemical processing of raw materials not only within one single plant, but within the framework of different chemical processes which are tied together. The most general scheme represents a system of closely connected complex chemical processes. (See fig 1). Into this scheme quantities $g_{10}, g_{20} \ldots g_{\nu_0} \ldots g_{mo}$ are introduced, denoting charges $1,2 \ldots \ldots, \nu, \ldots.m$ of the reactors with an independent (prescribed) amount of raw material, and $g_{1'0}$, $g_{2'0} \ldots \ldots g_{\nu'0} \ldots \ldots g_{m'0}$ denoting charges of the reactors with dependent amounts of raw material. The independent and the dependent reactor charges with fresh raw material consist of the following mixture of components.

$$g_{\nu_0} = \sum g_{\nu' 0 i \nu'}, \quad g_{\nu' 0} = \sum g_{\nu' 0 i \nu'}, \quad (1)$$

$i_\nu = A_\nu, \, B_\nu, \, C_\nu \ldots;$
$= 1,2 \ldots m;$

The author arrives at a system of equations and solves it by dividing the system into two parts. After the total charges have been

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Development of the Theory of Recirculation Processes.   20-3-43/59

computed, the amount of independent charges per component is to be calculated. A judgement can be given, to what extent the postulated production rates are covered by the raw material of the corresponding composition. If the production rates should not correspond to the amount of total charges, different production rates must be introduced and the system must be solved until there is correspondence between the amount of charge and the production rates. 2. The number of separate components of all kinds of fresh raw material with the exception of one component in each reactor, is determined from the formula (7), which is obtained from the introduction of the values of the total charges into the corresponding equations of the system. In this way the solution of the system is complete. For this purpose the following is necessary: a) by using the system (5), knowing the corresponding g_n to determine the amount of fresh charge per component of each reactor with an independent supply.

b) knowing $g_{v,n}$, by using the system (3) the supply per component of each reactor with a dependent charge with fresh raw material is to be determined. All variants of the solutions of the system (4) in the manner detailed here are correct, if the addition of arbitrary m'-components is set equal to zero. Each variant demands, that the fresh supply of certain components is set equal to zero. They

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Development of the Theory of Recirculation Processes.   20-3-43/59

cannot be known beforehand, because the amount of all the recircu-
lant substances entering a reactor is unknown. If the variant com-
puted appears to be undesired, the fresh supply of other components
must be set equal to zero and the problem must be solved as many
times until the desired variant has been found. In general the re-
circulants must not be carried away, but the desired composition
should be obtained by an addition of the missing components from
outside. Very often it can be immediately found, which component
in each reactor of a dependent system possesses a fresh supply,
which equals zero. There are 2 Slavic references and 1 figure.

ASSOCIATION: Petroleum Institute of the AN Azerbaydzhan SSR (Institut nefti AN A-
zerbSSR)

SUBMITTED: February 11, 1957

AVAILABLE: Library of Congress.

Card 3/3

NAGIYEV, M.F.; KARAMZIN, P.V.; SHAKHTAKHTINSKIY, T.N.

Laws of recycling processes in chemical technology. Azerb.
khim.zhur. no.2:11-21 '60.
(MIRA 14:8)
(Chemical reaction--Conditions and laws)
(Petroleum--Refining)

NAGIYEV, M.F.; KARAMZIN, P.V.; GUSEYNOVA, A.M.

Application of the theory of the steady-state thermal
conditions of exothermic reactions to the solution of
practical problems. Azerb.khim.zhur. no.4:69-74 '60.
(MIRA 14:8)
(Ethylene oxide) (Thermochemistry)

NAGIYEV, M.F.; KARAMZIN, P.V.; STEFANSKAYA, T.G.

Development of the theory of recirculatory processes in chemical technology. Dokl. AN Azerb. SSR 17 no.6:471-478 '61.

(MIRA 14:8)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.
(Chemistry, Technical)

NAGIYEV, M.F.; KARAMZIN, P.V.; STEFANSKAYA, T.G.; ZEYNALOVA, T.M.

Effective solutions of problems in the theory of recycling
processes. Azerb. khim.zhur. no.3:3-15 '61.   (MIRA 14:11)
        (Chemical engineering--Problems, exercises, etc.)

NAGIYEV, M.F.; KARAMZIN, P.V.; MIRDZHAFAROVA, T.M.

Application of linear programming methods to the solution of problems of the theory of recycling processes in chemical technology. Azerb. khim. zhur. no.3:85-92 '62.   (MIRA 16:12)

PLAKSIN, I.N.; KARMAZIN, V.I.; OLOFINSKIY, N.F.; NORKIN, V.V.;
KARAMZIN, V.V.; MAKARENKO, M.G., red.

[New trends in the concentration of disseminated iron ores]
Novye napravleniia glubokogo obogashcheniia tonkovkraplen-
nykh zheleznykh rud. Moskva, Izd-vo "Nauka," 1964. 202 p.
(MIRA 17:4)

NIGIYEV, M.F.; KARAMZIN, P.V.; ZAYTSEVA, Z.A.

Theory of reactors operating with the recycling system
(on temperature gradient). Azerb. khim. zhur. no.1:
105-110 '64.

(MIRA 17:5)

NAGIYEV, M.F.; KARAMZIN, P.V.; ZAYTSEVA, Z.A.

Theory of reactors operating with total recycling; on the con-
centration gradient. Azerb. khim. zhur. no.5:79-84 '63
(MIRA 17:8)

KARAMZIN, V.A.

Investigating the consumption of lubricant by a sliding
bearing under complex load conditions. Avt. prom. 30 no.8:
8-11 Ag '64.   (MIRA 17:11)

1. Moskovskiy avtozavod imeni Likhacheva.

KARAMZIN, V.A., inzh.

Investigating critical points of temperature conditions in
sliding bearings. Vest. mashinostr. 44 no. 4:42-45 Ap '64.
                                            (MIRA 17:5)

CA KARAMZIN V I

The dependence of the quality of open-hearth steel on melting conditions. V. I. Karamzin and S. N. Myiko. *Teoriya Prakt. Met.* 1939, No. 1, 28–34; *Khim. Referat. Zhur.* 1939, No. 8, 74.—The tech. process of the open-hearth melting for locomotive construction was investigated. The optimum process is characterized first by an energetic boiling which dies down gradually. During the hot boiling process Mn decreases gradually or remains const. (0.25–0.30%), while decarburization is intensive. When C is rapidly burned by a superoxidized slag, a large amt. of burning of the oxidizers is observed and the metal is contaminated. Slow boiling with a dense active slag gives metal that is dense and contains an increased amt. of gases and admixts. The melting process is slow, so the productivity of the furnaces is low. On slow boiling at the beginning and a very rapid boiling at the end of melting, the bath is satd. with FeO, analyses are difficult, a large amt. of oxidizers is burned, and the metal contains gases and is contaminated otherwise. For all grades of steels it is recommended to control the fluidity of the metal with Sims viscometer.   W. R. Henn

ASM-SLA   METALLURGICAL LITERATURE CLASSIFICATION

KARAMZIN, V.I., kandidat tekhnicheskikh nauk.

Separators with closed magnetic systems for magnetite ores and
suspensions. Ger.zhur.no.10:41-49 O '55.   (MLRA 9:2)
          (Magnetic separation of ores)   (Magnetite)

... spectrochemical isotopic analysis of mineral mixtures ...

SHINKORENKO, Stanislav Fedorovich; MARGULIS, Vladimir Solomonovich;
NIKOLAYENKO, Viktor Pavlovich; KHARLAMOV, Vadim Sergeyevich;
DROZHILOV, Lev Aleksandrovich; GUBIN, Georgiy Viktorovich;
OSTAPENKO, Pavel Yefimovich; KARAMZIN, V.I., prof., doktor
tekhn. nauk, retsenzent; RYKOV, N.A., otv. red.

[Handbook on the dressing and sintering of ferrous metal
ores] Spravochnik po obogashcheniiu i aglomeratsii rud
Chernykh metallov. [By] S.F.Shinkorenko i dr. Moskva,
Nedra, 1964. 571 p.
(MIRA 18:2)

KARAMZIN, V.I., prof.; DOVZHIK, N.S.; MALETSKIY, N.A.; GUBIN, G.V.;
BUSHEV, V.P.

Using the Krupp-Renn process in processing Kerch Peninsula ores.
Obog. rud 9 no.4:27-29 '64.
(MIRA 18:5)

KRUTIKOVA, Mariya Sergeyevna; KARAMZIN, V.P., nauchnyy red.;
SAMYLINA, S.I., tekhn. red.

[Organization of research institutions in the field of
atomic energy in France] Organizatsiia nauchno-issledova-
tel'skikh uchrezhdenii v oblasti atomnoi energii vo
Frantsii. Moskva, VINITI, 1963. 81 p.   (MIRA 16:6)
        (France--Atomic energy research)

NEMAL'TSEVA, T.M., nauchn. sotr.; ALEKSANDROV, L.A., nauchn. sotr.;
KARAMZIN, V.P., nauchn. red.; KAZNINA, L.A., red.;
YERMACHENKOVA, L.M., tekhn. red.

[Organization of atomic energy research in Japan] Organiza-
tsiia nauchnykh issledovanii po atomnoi energii v IAponii.
Moskva, Vses.in-t nauchn. i tekhn. informatsii, 1963. 66 p.

(Japan—Atomic energy research)   (MIRA 16:12)

SOKOLOV, Lev, Gennadiyevich; KARAMZIN, Ye.M., red.; KRUGLOVA, Ye.M.,
    red. izd-va; LAVRENOVA, N.B., tekhn. red.

    [Regular steamship lines of the U.S.S.R. and people's democra-
    cies] Morskie reguliarnye linii SSSR i stran narodnoi demokra-
    tii. Moskva, Izd-vo "Morskoi transport," 1961. 30 p.
                                                    (MIRA 14:5)
                (Europe, Eastern--Steamboat lines)

KRAMAROV, Efraim Menakhimovich; KARAMZIN, Ya.V., red.; KRUGLOVA, Ye.M.,
    red. izd-va; LAVRENOVA, N.B., tekhn. red.

[Regular shipping lines in capitalist countries] Morskoe lineinoe
sudokhodstvo kapitalisticheskikh stran. Moskva, Izd-vo "Morskoi
transport," 1961. 215 p.   (MIRA 14:10)
                    (Merchant marine)

KARAMZINA, K.N.; DITKIN, V.A., professor, redaktor; KOPNOV, Ye.V.,
redaktor; SHEVCHENKO, G.N., tekhnicheskiy redaktor

[Tables of Jacobi polynomials] Tablitsy polinomov IAkobi. Moskva,
Izd-vo Akademii nauk SSSR, 1954. 249 p.   (MIRA 8:2)
    (Functions, Orthogonal)

L.N. KARAMZINA

BASS, N.A., inzh.; ZABEZHANSKIY, I.I., inzh.; KARAMZINA, N.A., inzh.;
MIKHILENKO, A.P., inzh.

Automatic voltage regulation in the substations of an electric
power system. Elek. sta. 32 no.12:18-25 D '61.   (MIRA 15:1)
                    (Electric power distribution)

ACC NR: AP6032135   (N)   SOURCE CODE: UR/0391/66/000/009/0032/0036

AUTHOR: Karamzina, N. M. (Moscow); Pavlova, I. V. (Moscow)

ORG: Institute of Industrial Hygiene and Occupational Diseases, AMN SSSR (Institut gigiyeny truda i profzabolevaniy AMN SSSR)

TITLE: Oxidation processes in lungs of rats after poisoning with various beryllium compounds

SOURCE: Gigiyena truda i professional'nyye zabolevaniya, no. 9, 1966, 32-36

TOPIC TAGS: animal physiology, respiratory system, enzyme, poison effect, rat , beryllium compound, aluminum compound

ABSTRACT: The comparative effect of poisoning with various beryllium compounds on pulmonary oxidation processes in white rats was studied. A single dose of beryllium oxide or a mixture of equal parts metallic beryllium and aluminum introduced intratracheally caused a sharp increase in the weight of lungs of experimental animals and inhibited the oxidation of alpha-ketoglutaric and malic acids by pulmonary tissue enzymes. After poisoning with beryllium-aluminum alloys, pulmonary oxidation processes were much less affected, apparently because of the

Card 1/2   UDC: 616.24-003.669.725-092.9-07:616.24--008.922.1

ACC NR: AP6032135

altered physical and chemical properties of the beryllium alloy. Orig.
art. has: 3 tables.
                                                                [W.A. 50]

SUB CODE: 06/ SUBM DATE: 12Dec64/ ORIG REF: 004/ OTH REF: 001

Card 2/2

AVRUNINA, G.A.; KARAMZINA, N.M.; FEDOROVA, V.I.; YANOVSKAYA, B.I.

Biologic action of high energy irradiation. Biul. eksp. biol. i med.
52 no.8:52-56 Ag '61.
(MIRA 15:1)

1. Iz Instituta gigiyeny truda i profzabolevaniy AMN SSSR i gruppy
pri deystvitel'nom chlene AMN SSSR B.A.Lavrove, Moskva. Predstavlena
deystvitel'nym chlenom AMN SSSR A.A. Letavetom.
(RADIATION—PHYSIOLOGICAL EFFECT)

. ULANOVA, I.P.; SAMOYLOVA, L.M.; KARAMZINA, N.M.; AVILOVA, G.G.

Toxicology of chloropelargonic acid condensation aerosols.
Toks. nov. prom. khim. veshch. no.5:89-100 '63.   (MIRA 17:9)

VITMAN, V.D.; VOINOVA, N.A.; DZHELEPOV, B.S.; KARAN, A.A.

Relative intensities of some γ-lines in the spectrum of Ta^{182}.
Izv. AN SSSR. Ser. fiz. 25 no.2:199-200 F '61.   (MIRA 14:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii im.
D.I. Mendeleyeva i Fiziko-tekhnicheskiy institut AN SSSR.
(Tantalum—Spectra)

VITMAN, V.D.; DZHELEPOV, B.S.; KARAN, A.A.

Relative intensities of γ-rays from RaC in the 1300-2520 Kev
energy range. Izv. A.N. SSSR. Ser. fiz. 25 no.2:201-206 F '61.
(MIRA 14:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii
im. D. I. Mendeleyeva.
(Bismuch—Isotopes)
(Gamma rays)

AUTHORS: Vitman, V. D., Voinova, N. A., Dzhelepov, B. S., Karan, A. A.

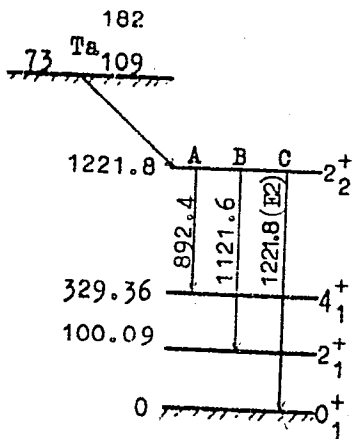TITLE: 892.4-kev gamma transition in the W^{182} nucleus

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 40, no. 2, 1961, 479-482

TEXT: The authors present measurement results of the intensity of 892.4-kev gamma transition from the 1221.8-kev level to a level of the fundamental rotational band in W^{182}. The experimental results obtained for the $Ta^{182} \rightarrow$ W^{182} decay are illustrated in the decay scheme. The transitions B and C are well known. The present paper gives details concerning transition A. The 892-kev line has been known since 1950; its relative intensity (intens-

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892.4-kev gamma ...

¹⁸²

$^{182}_{73}$Ta$_{109}$

1221.8   A B C 2^+_2

892.4   1121.6   1221.8(E2)

329.36 4^+_1
100.09 2^+_1

0   0^+_1

Card 2/6

ity of the 892.4-kev gamma radiation referred
to that of the 1221.8-kev gamma radiation) was
found to be 0.017 or less. The following value
was obtained by V. S. Gvozdev, L. I. Rusinov,
and Yu. L. Khazov from the conversion electron
spectrum: $K_{892.4}/K_{1221.8} \leqq 0.02$; C. J. Gallagher
et al. (Phys. Rev. 113, 1298, 1959) found a line
with 894.7±0.8 kev $(T_{1/2} = 13$ hr) of consider-
ably higher intensity: $K_{894.7}/K_{1221.8} = 2;3$ in
Re$^{182} \rightarrow$ W^{182} decay. According to the authors,
this line is too intense to be related to the
1221.8-kev level of W^{182}. To explain this
problem, the ranges 850-910 and 1100-1250 kev
of the gamma spectrum were studied by means a
new magnetic spectrometer (Elotron) which had
been built of the VNIIMa; this spectrometer is
characterized by high sensitivity (1.2% in the

892.4-kev gamma...   S/056/61/040/002/015/047
                                       B102/B202

range of 1 Mev) and low background. The recoil-electron spectrum is shown
in Fig. 2. The results were entered without consideration of the back-
ground (which was constantly about 0.04 pulses per minute).
$I(\gamma_{892.4})/I(\gamma_{1221.8}) \leqslant 0.006$ was obtained for the intensity ratio. On the
basis of the theory of non-axial nuclei of A. S. Davydov et al., the
authors then calculated the relative intensities of the 1221.8 and 1121.6
kev transitions. Using a formula by Davydov with $E(2_1^+) = 100.092$ kev and
$E(2_2^+) = 1221.8$ kev, γ was found to be 11.40°. The following results were
obtained:

Card 3/6

892.4-kev gamma...

Intensity ratios for the transitions A, B, C from the 1221.8-kev level

Transition energy, kev	Experimental intensity ratio	Theoretical intensity ratios						
		acc. to Davydov		acc. to Alaga				
		$\gamma = 11.40°$	$\gamma' = 11.20°$	K=0	K=1	K=2		
						without correction	with correction	
892.4	≤ 0.6	3.8	3.7	53.6	23.8	1.46	3.2
1121.6	122	131	130	93.2	23.5	93.2	122
1221.8	100	100	100	100	100	100	100

Card 4/6

892.4-kev gamma...   S/056/61/040/002/015/047
                                           B102/B202

According to the theory of axial nuclei by G. Alaga et al (Kong. Dan. Vid.
Selsk.Mat.-fys.Medd. 29, 9, 1955), the intensity ratio of the transitions
depends on the quantum number K of the 1221.8-kev level. The transition
intensity ratios following from this theory are also shown in the table.
The values for K=2 are in fairly good agreement with the measured values;
those obtained for the 892.4-kev transition, however deviate largely.
N. N. Zhukovskiy is mentioned. There are 2 figures, 1 table, and 17
references: 7 Soviet-bloc and 10 non-Soviet-bloc.

ASSOCIATION: Vsesoyuznyy institut metrologii (All-Union Institute of
             Metrology)

SUBMITTED: September 24, 1960

Card 5/6

L 10618-66

ACC NR: AP5027300   SOURCE CODE: UR/0241/65/010/010/0010/0014

AUTHOR: Yershov, E. B.; Keran, A. A.; Spirin, V. D.; Shamov, V. P.

ORG: Scientific Research Institute of Radiation Hygiene, Leningrad
(Nauchnoissledovatel'skiy institut radiatsionnoy gigieny)

TITLE: Experimental determination of absorbed dose from alpha-emitters
in contact media

SOURCE: Meditsinskaya radiologiya, v. 10, no. 10, 1965, 10-14

TOPIC TAGS: radiation dosimetry, alpha particle, medical nuclear appli-
cation, applied mathematics, mathematic prediction, anatomic model
irradiation, radiation biologic effect, histology

ABSTRACT: Present calculation of absorbed radiation doses and their
distribution in tissues upon internal irradiation by alpha particles
does not sufficiently consider the layer between the active and the
passive medium, that is, the secretion layer in intestinal irradiation.
This work involves study of factors influencing the dose and experimen-
tal determination of the absorbed dose according to the depth of the
irradiated tissue, either without filter between the contact media or
for any filter thickness, by means of an alpha spectrometer and calcu-
lation. The model for the active medium was a thick layer of pressed

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UDC: 615.849.7-031

L 10618-66

ACC NR: AP5027300

talc with evenly distributed Pu^{239}, and that for the passive layer was koloxylin lamellae simulating cellular layers of various thickness. Even distribution of radioactive isotope and irradiation throughout the media was assumed. Based on the spectra obtained and insertion of values into the formula

$$E = \frac{\sum_i E_i \cdot N_i}{\sum_i N_i} \qquad (1)$$

where E_i is the energy of alpha particles corresponding to the i-channel; N_i the number of alpha particles with E_i energy, and further calculation in consideration of Δd layer, the formula

$$D_{\Delta d} = \frac{E_{\Delta d} \cdot 1.6 \cdot 10^{-8}}{\Delta d \cdot t \cdot 100} (rad/min). \qquad (5)$$

was arrived at for the dose absorbed in layer Δd. It is concluded that this method of simulation permits determination of the distribution of the quantity of dose absorbed according to the depth of the irradiated medium (mucosal cover of the gastrointestinal tract) from the known thickness of the filter layer (secretion layer in the tract). The mean energy of alpha particles leaving the thick emitter is equal to 0.56 of

Card 2/3

L   10618-66

ACC NR: AP5027300

O

the maximal value. Energy liberation beyond the boundary of the source of a thickness equal to the path of alpha particles is 14% of the maximal energy liberation within this layer. In the absence of an absorbing filter the amount of absorbed dose on each cellular layer compared to the mean dose over the whole path is equal to:

$$D_I = 2.64 \cdot \bar{D}_{Ra}; \quad D_{II} = 1.26 \cdot \bar{D}_{Ra}; \quad D_{III} = 0.48 \bar{D}_{Ra};$$

$$D_{IV} = 0.1 \cdot \bar{D}_{Ra}.$$

The indices I, II, III and IV designate the corresponding cellular layers. Orig. art. has: 5 formulas and 4 figures.

SUB CODE: 06   /   SUBM DATE: 12Aug64/   ORIG REF: 000/   OTH REF: 003

HW

Card 3/3

L 01065-66   EWT(m)   DIAAP   DM

ACCESSION NR: AP5014543

UR/0089/65/018/005/0519/0520

539.12   39.121.64

AUTHOR: Yershov, E. B.; Karan, A. A.; Shamov, V. P.

TITLE: Concerning the energy distribution of alpha particles emitted from a thick source

SOURCE: Atomnaya energiya, v. 18, no. 5, 1965, 519-520

TOPIC TAGS: Alpha emitter, thick source, energy distribution, moderating ability, range energy ratio

ABSTRACT: In view of the difficulty of preparing thin screens to measure the moderating ability of a substance and the range/energy ratio of alpha particles in the investigated substance, the authors consider the possibility of determining the range-energy relation for a thick flat emitter on the basis of an analysis of the form of its alpha-particle spectrum. The spectrum was measured with an alpha chamber and a 100-channel pulse-height analyzer. The pressed working compound (area ~ 3 cm², thickness ~ 2 mm) was placed in a holder and contained uniformly distributed Pu239 atoms in a mass of talcum powder. The empirical form   of the spectrum was obtained by breaking up the measured spectrum into four energy ranges, with a separate empirical formula obtained for each. By using the fact that talcum has

Card 1/2

L 01065-66

ACCESSION NR: AP5014543

moderating properties close to those of aluminum, it is found that the range-energy curve obtained from the empirical relations of the present work is in good agreement with calculations by others for aluminum. It is thus concluded that the proposed method makes it possible to find, with sufficient degree of accuracy, the moderating characteristics of any complicated substance which serves as a bulky base for a thick alpha source. Orig. art. has: 1 figure and 1 formula.

ASSOCIATION: none

SUBMITTED: 18Mar64

NR REF SOV: 002   ENCL: 00
                               OTHER: 002   SUB CODE: NP

Card 2/2 DP

VINOGRADOV, V.S.   (Moskva); KARAN, A.B. (Moskva); BOL'SHAKOVA, V.M.
        (Moskva).

Selecting flow sheets for argon-arc suspended spot welding of
aluminum alloys. Avtom. svar. 17 no.6:29-32 Je '64   (MIRA 18:1)

KARAN, A. B.

Subject	:	USSR/Engineering-Welding

AID P - 5056

Card 1/1   Pub. 107-a   -   5/9

Authors   : Tret'yakov, F. E., A. B. Karan and S. M. Valeyev

Title   : Arc-welding of thin steel plates with a CO_2 shield

Periodical : Svar. proizv., 20-22, My 1956

Abstract   : The authors present the results of their experimental
research on automatic and manual carbon dioxide arc
welding of steel plates 1 to 3 mm thick, carried out at
the "Elektrik" (Electrician) Plant (Leningrad). The
ADS-1000-2 welder was used, some other equipment and
electrodes were described. Five tables, 2 diagrams,
2 graphs, 3 photos, and GOST standards.

Institutions: Scientific Research Institute of Aviation Technology
(NIAT), All Union Scientific Research Institute of the
Autogenous Treatment of Metals (VNIIAvtogen).

Submitted : No date

AUTHORS: Tret'yakov, Fe. Ye., Candidate of Technical Sciences, Karan, A. B., Engineer, Tsar'kov, G. P., Technician

TITLE: The Strength of AMГ6T (AMG6T) Alloy Spot Welds at High Temperatures

PERIODICAL: Svarochnoye proizvodstvo, 1960, No. 1, pp. 27-28

TEXT: Data are presented on the strength of AMG6T alloy spot welds subjected to shearing and rupture tests at 20, 200 and 300°C. The specimens were welded on a MTИП-450-2 (MTIP-450-2) three-phase pulse machine. Prior to welding they were etched in orthophosphoric acid. Cadmium-copper electrodes were used. The diameter of welded spots was selected depending on the thickness of the parts to be welded according to industrial instructions. The penetration depth was 40 to 50% of the sheet thickness under welding conditions given in Table 1. The welded specimens were tested on a 30-ton machine equipped with a heating installation which ensured the uniform heating of specimens up to 300°C. The temperature was checked with an ЭПД-17 (EPD-17) thermoregulator. During the tests the specimen was held for 5 minutes at the given temperature and was then subjected to loading until its breakdown. When subjected to static shearing

Card 1/2

S/135/60/000/001/004/005
A006/A001

The Strength of AMГ6T (AMG6T) Alloy Spot Welds at High Temperatures

the strength of a single-spot weld decreased in 1 - 2 mm thick specimens by
8 - 15% at 200°C and by 24 - 39% at 300°C, as compared to the strength at normal
temperature. The strength of single spot welds of 1 - 3 mm thick specimens
subjected to static rupture increased slightly at 200°C and decreased at 300°C
by 20 - 32% as compared to normal temperature. The ductility cf the spot weld
was estimated by calculating the ratio R

$$\frac{R_{rupt}}{R_{sh}} \cdot 100\%$$

where R_{rupt} and R_{sh} are the corresponding breaking forces in rupture and
shearing tests. This ratio increases generally with a greater thickness of the
material and higher temperature of tests when welding AMG6T alloys. [Abstractor's
note: Subscripts rupt and sh are translations from the original ot (otryv -
rupture) and sr (srez - shear)]. There are 2 figures and 2 tables.

Card 2/2

85187

S/135/60/000/003/004/005
A115/A029

1. 2300   only 2208, 2708

AUTHORS: Tret'yakov, F.Ye., Candidate of Technical Sciences, Karan, A.B.,
Graduate Engineer and Tsar'kov, G.P., Technician

TITLE: Relief Welding of Alloyed Steel and Titanium Parts

TEXT: The authors describe relief welding of anchor nuts, bushes and
connecting pipes of BT-1 (VT-1) titanium or ЭИ 654 (EI 654) and 30ХГСА
(30KhGSA) steel. All parts were welded to 2-3 mm plates. Ring-embossed parts
were made of rod-iron on a turning-lathe and had a class 4 surface finish accord-
ing to ГОСТ-2789-51 (GOST-2789-51). Anchor nuts were subjected to hard forging,
hardening and sand-blasting. Parts of VT-1 titanium and EI 654 steel were de-
greased with acetone and sometimes finished with medium emery cloth. Satisfac-
tory results were obtained with titanium (Fig. 1a), EI 654 steel (Fig. 1b) anchor
nuts, VT-1 titanium and EI 654 connecting steel pipes and bushes (Fig. 1v, g),
and double-looped anchor bolts of EI 654 and 30 KhGSA steel (Fig. 2). Special
electrodes of cadmium copper and МЦ -4 (MTs-4) alloy of NV 110 hardness were
used. Relief contact welding of an anchor nut is shown in Figure 3. Single-
phase МТП-75 (MTP-75) welding machines equipped with ПИТ-100 (PIT-100) cur-

Card 1/2

/P. 1210

AUTHORS: Kainova, G. Ye., Karan, A. B., Engineers

TITLE: Welding aluminum alloy ВАД 1 (VAD1) [Д 19 с (D19s)]

PERIODICAL: Svarochnoye proizvodstvo, no. 6, 1962, 23 - 25

TEXT: An investigation was made of the weldability of thermal-strengthened VAD1 (D19s) aluminum alloy sheets, 1.84 - 1.88 mm thick. In annealed state the VAD1 alloy shows $\sigma_b \geq$ 20 kg/mm^2; δ = 18 $\div$ 20%. The ultimate strength of the base material after heat treatment, at room temperature, is 42.7 kg/mm^2, at 300°C it is 18.5 kg/mm^2 and at 350°C - 12.7 kg/mm^2. The strength of the base and the weld metal was determined at various temperatures and by using various welding methods. It was found that the VAD1 alloy can be successfully welded by the resistance and argon-arc methods. Best results are obtained in automatic argon-arc welding with a non-consumable lateral-supplied electrode. Heat treatment of argon-arc welded joints (quenching at 505 - 510°C, water cooling and 10-day natural aging) assures equal strength of the weld and the base metal at both normal and elevated temperatures. Joints produced by seam welding have a strength of

Card 1/2

ACCESSION NR: AP4039766   S/0125/64/000/006/0029/0032

AUTHOR: Vinogradov, V. S. (Moscow); Karan, A. B. (Moscow); Bol'shakova, V. M. (Moscow)

TITLE: Argon arc spot welding of unsupported aluminum alloy thin sheets

SOURCE: Avtomaticheskaya svarka, no. 6, 1964, 29-32

TOPIC TAGS: aluminum alloy, alloy thin sheet, arc spot welding, sheet arc spot welding, thin sheet, thin sheet welding, AMg6 alloy welding, AMg6 alloy

ABSTRACT: In an attempt to develop a suitable technique for TIG or MIG spot welding of unsupported thin aluminum alloy sheets, four welding techniques have been tested: TIG and MIG with melting through the upper sheet and TIG and MIG with holes predrilled in the upper sheet. Tests were conducted with AMg6 alloy sheets 1 mm (upper sheet) and 2 mm (bottom sheet) thick. ADSP-2 and ADSV-2 automatic welders fitted with modified electrode holders and a

Card 1/2

KAINOVA, G.Ye., inzh.; KARAN, A.B., inzh.

Welding of the VAD1 (D19s) aluminum alloy. Svar. proizv.
no.6:23-25 Je '62.   (MIRA 15:6)
                 (Aluminum alloys--Welding)

L 53988-65   EPA(s)-2/EWT(m)/EWA(d)/EWP(v)/EPR/T/EWP(t)/EWP(k)/EWP(b)/EWA(c)
Pf-4/Ps-2   IJP(c)   JD/HM/HW
ACCESSION NR: AP5015510

UR/0286/65/000/008/

AUTHOR: Vinogradov, V. S.; Karan, A. B.; Bol'shakova, V. M.

TITLE: Method of spot, argon shielded-arc welding. Class 21, No. 170136

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 8, 1965, 42

TOPIC TAGS: welding, spot welding, argon shielded arc welding, aluminum welding, aluminum alloy welding, arc welding

ABSTRACT: This Author Certificate introduces a method of spot, single-
shielded-arc welding of aluminum or aluminum-alloy thin-sheet parts performed
thorough penetration of the bottom sheet. To carry out welding without
welding conditions are maintained so as to prevent
on the bottom side of the lower sheet.   [ND]

ASSOCIATION: none

SUBMITTED   06Apr63   ENCL: 00   SUB CODE

NO REF SOV: 000   OTHER: 000   ATD PRESS: 4021
Card 1/1

KARAN, Yu.B.

ANTOHOV, I.A., kand.tekhn.nauk; ANTOSHIN, Ye.V., inzh.; ASINOVSKAYA, G.A., inzh.; VASIL'YEV, K.V., kand.tekhn.nauk; GUZOV, S.G., inzh.; DEYKUN, V.K., inzh.; ZAYTSEVA, V.P., inzh.; KAZBEKOV, P.P., inzh.; KARAN, Yu.B., inzh.; KOLTUNOV, P.S., kand.tekhn.nauk; KOROVIN, A.I., inzh.; KRZHECHKOVSKIY, A.K., inzh.; KUZNETSOVA, Ye.I., inzh.; MATVEYEV,N.N., tekhnik; MOROZOV, M.Ye., inzh.; NEKRASOV, Yu.I., inzh.; NECHAYEV, V.D., kand.tekhn.nauk; NINBURG, A.K., kand.tekhn.nauk; SPEKTOR,O.Sh., inzh.; STRIZHEVSKIY, I.I., kand.khim.nauk; TESMENITSKIY, D.I., inzh.; KHROMOVA, TS.S., inzh.; TSEUNEL', A.K., Inzh.; SHASHKOV, A.N., kand. tekhn.nauk, dots.; SHELECHNIK, M.M., inzh.; SHUKHMAN, D.Ya., inzh.; EDEL'SON, A.M., inzh.; VOLODIN, V.A., red.; UVAROVA, A.F., tekhn.red.

[Machines and apparatuses designed by the All-Union Institute of Autogenous Working of Metals] Mashiny i apparaty konstruktsii VNIIAvtogen. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi lit-ry, 1957. 173 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut avtogennoi obrabotki metallov, no.9)
        (Gas welding and cutting--Equipment and supplies)

YUGOSLAVIA / Chemical Technology, Chemical Products and Their   H-28
               Application. Food Industry.

Abs Jour   : Ref Zhur - Khimiya, No 5, 1959, No. 17436

Author   : Savic, I.; Karan-Durdic, S.
Inst   : Not given
Title   : Changes in Meats as Affected by Thermal Treatment

Orig Pub   : Veterin. glasnik, 1957, 11, No 2, 264-269

Abstract   : Review of effects resulting from heating on the changes
              of pH, color, and vitamin content of meats. Bibliography
              includes 5 titles.

Card 1/1

ABRAWADZE, L.

KARANADZE, L.

Improving roads in Abkhazia. Avt. dor. 21 no.1:35-36 Ja '58.
(Abkhazia--Roads)   (MIRA 11:1)

KARANCHENTSEVA, V.I.

Introducing hydraulic coal mining in the Donets Basin.
Biul. tekh.-ekon. inform. Gos. nauch.-issl. inst. nauc...
i tekh. inform. 17 no.3:10-12 '64.   (MIRA 17:5)

SOBIN, V.L.; KARANCHUK, U.T.

    Device for active control in dimensional grinding of butt ends.
    Avt.prom. 27 no.10:39 O '61.   (MIRA 14:10)

    1. Minskiy avtozavod.
                   (Grinding and polishing)

KARANCHUK, P.G.

ZAYEZDNYY, Aleksandr Mikhaylovich; KARANCHUK, P.G.,otvetstvennyy
    redaktor; VORONOVA, A.I.,redaktor; RITTBERGER, N.V.,
    tekhnicheskiy redaktor

[A collection of problems and exercises for a course in
"theoretical radio engineering"] Sbornik zadach i uprazhnenii po
kursu "Teoreticheskaia radiotekhnika." Moskva, Gos. izd-vo lit-ry
po voprosam sviazi i radio, 1957. 470 p.   (MLRA 10:5)

        (Radio--Problems, exercises, etc.)

44817

S/044/63/000/001/029/053
A060/A000

AUTHOR: Karandakov, G.V.

TITLE: On a possible principle for simulating systems of linear differential equations with boundary conditions.

PERIODICAL: Referativnyy zhurnal, Matematika, no. 1, 1963, 1 - 2, abstract 1V3
(Tr. Rostovsk. inzh.-stroit. in-ta, 1961, no. 23, 15 - 20)

TEXT: The author considers one of the possible principles for obtaining solutions of systems of ordinary linear differential equations with boundary conditions by means of analog computers. A simulation concept is proposed, consisting in that one sets up two systems of equations on the analog computer. The first corresponds to the equation being solved, and the second has for its solution a function which is the mirror image of the first system. The second system possesses the property that, if one substitutes in it for the initial conditions all the end values of the first system, then we obtain as result of solving the initial conditions for the first system. In solving both systems one obtains the requisite function, satisfying all the boundary conditions. We have the canoni-

Card 1/4

On a possible principle for simulating systems S/044/63/000/001/029/053
A060/A000

cal system of differential equations

$$\frac{dx_1}{dt} = a_{11}x_1 + a_{12}x_2 + \ldots + a_{1n}x_n + b_1 \,,$$

$$\frac{dx_2}{dt} = a_{21}x_1 + a_{22}x_2 + \ldots + a_{2n}x_n + b_2 \,,$$

$$. \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad ,$$

$$\frac{dx_n}{dt} = a_{n1}x_1 + a_{n2}x_2 + \ldots + a_{nn}x_n + b_n$$

and let this system have as its solution the function x = f (t), satisfying all
the specified conditions. Then one constructs a system of differential equations
which has as its solution $\overline{x}$ = f₁ (t) - the mirror image of the solution x = f (t).
For this, in the initial system of differential equations, t is replaced by -t.
One obtains a conjugate system, written like this:

$$-\frac{d\overline{x_1}}{dt} = a_{11}\overline{x_1} + a_{12}\overline{x_2} + \ldots + a_{1n}\overline{x_n} + b_1 \,,$$

Card 2/4

On a possible principle for simulating systems .....

$$-\frac{dx_2}{dt} = a_{21}x_1 + a_{22}x_2 + \ldots + a_{2n}x_n + b_2 ,$$

$$\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$$

$$-\frac{dx_n}{dt} = a_{n1}x_1 + a_{n2}x_2 + \ldots + a_{nn}x_n + b_n .$$

The computer realization of this system yields the conjugate solution for positive time as the author indicates. To prove this, it is demonstrated that the roots of the characteristic equations of the two systems differ in sign. The author notes that in solving systems with variable coefficients a (t) and variable right--hand members b (t), one must use in the conjugate system the conjugate quanti-ties $\bar{a}$ (t) and $\bar{b}$ (t). Moreover, since in the solution of boundary problems the initial conditions are often known partially, the solution of the problem is car-ried out by the method of successive approximations. In the first approximation the missing initial conditions of the base system of differential equations are specified arbitrarily. Subsequent initial conditions are taken from the results of the solution of the conjugate system. The convergence criteria of the itera-

Card 3/4

On a possible principle for simulating systems....

tion process are not investigated by the author.

[Abstracter's note: Complete translation]

S/044/63/000/001/029/053
A060/A000

P.P. Vasil'yev

Card 4/4

KARANDAKOV, G.V., aspirant; KEROPYAN, K.K., prof., doktor tekhn.
nauk, red.

[Some problems in the theory of calculating rod systems
by the electric modeling method; a scientific report]
Nekotorye voprosy teorii rascheta sterzhnevykh sistem me-
todom elektromodelirovaniia; nauchnoe soobshchenie. Rostv-
na-Donu, Rostovskii inzhenerno-stroit. in-t, 1963. 38 p.
(MIRA 17:9)

S/777/61/000/000/004/005

AUTHORS: Pukhov, G. Ye., Vasil'yev, V. V., Grezdov, G. I., Karandakov, G. V., Proskurin, Ye. A., Levin, A. G.

TITLE: Device for the visual observation of the voltage distribution in electric-grid models.

SOURCE: Voprosy vychislitel'nyy tekhniki; mashiny, ustroystva, elementy i ikh primeneniye. Ed. by A. M. Novik. Kiyev, Gostekhizdat USSR, 1961, 99-104.

TEXT: The paper proposes a device that provides a reading of the most signifi-cant voltage values in electric analogs and thus afford a representation, for example, of the maximum values and the general character of the variation of bending moments in an electric analog of a stressed beam. The voltages to be measured enter a multi-channel commutator, where a control block governs their successive entry into the imput of a cathode-ray indicator (CRT) over a time τ. The scanning of the CRT is synchronized with the beginning of the commutation, and its duration is selected to equal the commutation period of the entire ensemble of the voltages to be meas-ured. The 3 alternative versions of this arrangement differ in the type of the com-mutator used and the method of the synchronous scanning along the axis of the abscissae: (1) An electromechanical commutator with a step-by-step switch.

Card 1/2

- Device for the visual observation of the S/777/61/000/000/004/005

(2) An electromechanical commutator with a collector. (3) An electronic commutator. An experimental investigation of these 3 types of commutators denotes their respective advantages and shortcomings: Advantages: Type (1) - simple design; permits the use of stock types of step-by-step switches; type (2) - relative freedom from noise; type (3) - total freedom from noise. Types (1) and (2) - direct voltage commutation with a transmission coefficient equal to 1 in all channels; type (3) - elevated commutation rate. Type (1) - commutator can be stopped at any step of the switch; type (2) - can operate with the ordinary ЭO7 (EO7) indicator; type (3) - no mechanical contacts, no rotation. Shortcomings: Type (1) - requirement for an indicator with prolonged image persistence; type (3) - awkward design if ordinary electron tubes are used for the commutation with a large number of points; types (1) and (2) - requirement for mechanical contacts and rotating parts; type (3) - need for equalization of the constants of the component gates and of the amplification according to channels to prevent a scatter of circuit and tube parameters when tubes are replaced; type (1) - significant noise effects during the motion of the switch. All three types do not permit the reading of voltages when the latter vary with a frequency that is close to the scanning frequency. There are 6 figures.

Card 2/2

8/271/63/000/003/023/049
A060/A126

AUTHOR: Karandakov, G.V.

TITLE: On the problem of simulating frames with unequal supports

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya
          tekhnika, no. 3, 1963, 6, abstract 3B34 (Tr. Rostovsk. inzh.-stroit.
          in-ta, 1961, no. 23, 107 - 110)

TEXT: The author considers a frame system with unequal supports having at
their ends a hinge support or a rigid fastening. It is demonstrated that when a
horizontal load is acting on this system, the application of the method of elec-
trical simulation to analyzing the system reduces to the simulation of frames
with displaceable elements. A network for the electrical simulation of a parti-
cular frame system illustrating the method described is shown. There are 3 fig-
ures, 2 tables and 5 references.

                                        I.V.

[Abstracter's note: Complete translation]

Card 1/1

KARANDASHEV, N. I.

"Sulfonation of 2-Chloronaphthalene."   Sub 28 Feb 52, Moscow Order of
Lenin Chemicotechnological Inst imeni D. I. Mendeleyev

Dissertations presented for science and engineering degrees in
Moscow during 1951.

SO: Sum. No. 480, 9 May 55

CHERNAKOV, Fedor Andreyevich, inzh.; RYZHIK, Z.M., inzh., red.;
KARANDASHEV, N.M., red.; FREGER, D.P., tekhn.red.

[Manufacture of welded frames from AMg-6T aluminum alloy]
Opyt izgotovleniia svarnogo korpusa izdeliia iz aliuminievogo
splava marki AMg-6T. Leningrad, Leningr.dom nauchno-tekhn.
propagandy, 1958.   17 p. (Informatsionno-tekhnicheskii listok,
no.59. Svarka i paika metallov)   (MIRA 12:4)
          (Aluminum alloys—Welding)

GAL'PERIN, Aleksandr Vladimirovich; TELESHEV, A.N., redaktor; KARAN-
DASHEV, V.D., redaktor; CHICHERIN, A.N., tekhnicheskiy redaktor

[Determining photographic exposure] Opredelenie fotograficheskoi
ekspozitsii; ekxponometriia dlia kino i fotoliubitelei. Moskva,
Gos.izd-vo "Iskusstvo," 1955. 110 p.   (MLRA 8:10)
        (Photography—Exposure)

KARANDASHEV, V.I.

Solve the problems of quality, reliability and durability
of articles more successfully. Standartizatsiia 28 no.10:
32-34 O '64.   (MIRA 17:12)

1. Nachal'nik bazovogo otdela standartizatsii Moskovskogo
soveta narodnogo khozyaystva.

Sulfonation by salts of sulfurous acid. XI. Action of sodium bisulfite on sodium nitrite. S. V. Bogdanov and N. N. Katundasheva. J. Gen. Chem. (U.S.S.R.) 16, 1613–18 (1946); cf. C.A. 41, 5482c.—Interaction of NaNO$_2$ with NaHSO$_3$ leads to products capable of sulfonating 2-naphthol and 2-hydroxy-3-naphthoic acid. To a boiling soln. of 10.5 g. Na 2-hydroxy-3-naphthoate, 0.4 mole NaHSO$_3$ (5 N), and 8.2 cc. 37% NaOH in 200 cc. water there was added over 1 hr. 6.9 g. NaNO$_2$ in 40 cc. water, after which boiling was continued 0.5 hr. The soln. was acidified with HCl and extd. with Et$_2$O. Analysis of the ext. showed 5.72 g. of the hydroxynaphthoic acid remained unchanged while 0.28 g. was transformed into 2-naphthol. The aq. soln. contained 2-hydroxy-1-naphthalenesulfonic acid (from 0.37 g. hydroxynaphthoate) and 1-sulfo-2-hydroxy-3-naphthoic acid (I) (from 2.88 g. starting material) with a 34.6% yield and 95.6% conversion of the amt. of hydroxynaphthoic acid. I forms a yellowish Na salt, needles (from water). The reaction mixt. evolved N$_2$O in the course of the reaction. If the NaNO$_2$ and NaHSO$_3$ are reacted per se in NaOH soln. and the resulting soln. treated with Na 2-hydroxy-3-naphthoate, the yield of sulfonated products is substantially lowered (to 5.3%). Heating of 0.05 mole Na 2-hydroxy-3-naphthoate in 200 cc. water to 75°, treating with 33.6 g. HON(SO$_3$K)$_2$, and boiling the mixt. 20 min. permit the isolation of 97.3% free 2-hydroxy-3-naphthoic acid with no evidence of sulfonation. Repetition of the expt. in the presence of NaOAc, Na$_2$HPO$_4$, or CaCO$_3$ gave substantially the same results. N(SO$_3$K)$_3$ gave similarly neg. results, thus showing that neither it nor the hydroxylamine compd. are responsible for the sulfonation. Reaction of NaNO$_2$ and NaHSO$_3$ with 2-naphthol under analogous conditions leads to 7.2% 2-naphthol-1-sulfonic acid, isolated as the di-Na salt. Refluxing 0.02 mole mono-Na salt of 1-sulfo-2-hydroxy-3-naphthoic acid in 100 cc. H$_2$O mixed with 0.2 mole NaHSO$_3$ and 0.05 mole NaOH 12 hrs. gives a nearly quant. amt. of 2-naphthol-1-sulfonic acid. The sulfonation reaction of the nitrite-bisulfite is evidently due to Raschig's ONSO$_3$Na.

G. M. Kosolapoff

Sulfonating by salts of sulfurous acid. XII. Action of some derivatives of sulfurous acid on anilines. B. V. Bogdanov and N. N. Kerandasheva (Ivanovsk Chem. Tech. Inst.). J. Gen. Chem. (U.S.S.R.) 17, 87–94 (1947)(in Russian); cf. C.A. 41, 6330.—PhNH₂ can be sulfonated by K₂SO₃.2NO (confirming Raschig, Ann. 241, 232(1887)), HON(SO₃K)₂, and HgNa sulfite. An emulsion of 25 cc. PhNH₂ in 200 cc. H₂O with a few drops of phenolphthalein and 7 g. K₂SO₃.2NO was heated to 85° and treated alternately with small portions of MgSO₃ and K₂SO₃.2NO (total: 40 g. and 22 g., resp.); KOH was then used to ppt. the Mg, the mixt. was filtered, and the filtrate, after extn. of the PhNH₂ with C₆H₆, was evapd. to dryness; extn. with hot EtOH gave K phenylsulfamate (C₆H₅O₃NSK) as colorless water-sol. leaflets. Similarly, 100 g. PhNH₂ and 100 g. H₂O were treated with 6 g. K₂SO₃.2NO and a drop of phenolphthalein and heated to boiling with stirring; the generated alkali was neutralized with 0.5 N HCl, and the mixt. cooled to 85° and treated with 6 g. K₂SO₃.2NO; the process of boiling was repeated until a total of 22 g. K₂SO₃.2NO had been used (3.5 hrs.). After working up as above the mixt. contained, as shown by hydrolysis of an aliquot portion with HCl, 1.82 g. PhNH₂ which was converted into the sulfo deriv. Repetition of the procedure at 85° gave 1.02 g. PhNH₂ in the sulfonated form. 2-Hydroxy-3-naphthoic acid failed to react with K₂SO₃.2NO at 80–90°. When 0.05 mol. Na 2-hydroxy-3-naphthoate, 78.8 cc. (0.4 mol.) Na₂SO₃, and 25.5 cc. 43% NaOH in 500 cc. H₂O were boiled in a H atm. until the air was displaced, then a slow current of NO was passed in for 12 hrs., there was obtained 8.03 g. unreacted acid, while the analysis of the aq. soln. showed that 0.1 g. of the acid had been transformed into 1-sulfo-2-hydroxy-3-naphthoic acid and 0.06 g. into 2-naphthol-1-sulfonic acid; repetition of the above process, using 8.5 cc. 43% NaOH and a 6-hr. treatment with NO, gave 6.32 g. of a mixt. of unreacted acid and 2-naphthol after acidification; the aq. soln. gave 0.09 g. unreacted acid and 0.51 g. 2-naphthol, while the analysis of the aq. soln. showed that 0.22 g. hydroxynaphthoic acid had been transformed into 1-sulfo-2-hydroxy-3-naphthoic acid and 0.85 g. into 2-naphthol-1-sulfonic acid. PhNH₂, (50 cc.), 100 cc. H₂O, and 63.5 g. HON(SO₃K)₂ were boiled 40 min. with stirring; after addn. of KOH and extn. with C₆H₆, the aq. layer was treated with AcOH to a slightly alk. reaction and filtered; evapn. gave the above-described PhNHSO₃K; analysis of the aq. soln. by hydrolysis of an aliquot showed that 4.65 g. PhNH₂ was sulfonated. PhNH₂ (50 cc.), 100 cc. H₂O, 100 g. KOAc, and 63.5 g. HON(SO₃K)₂ were boiled 3 hrs. with stirring; after diln. with H₂O and extn. with benzene, a part of the aq. soln. was hydrolyzed with HCl and gave 0.3 g. PhNH₂; the aq. layer absorbed HNO₂ but the soln. failed to give a test for a diazonium compd. PhNH₂ (25 cc.), 100 cc. H₂O, and 21.3 g. HgNaSO₃ were boiled 2.5 hrs. with stirring; after sepn. from Hg, the mixt. was made alk. by NaOH, extd. with C₆H₆, and evapd. to give some Na₂SO₃, followed by Na phenylsulfamate, water-sol. colorless plates (C₆H₅O₃NSNa.2H₂O); addn. of EtOH to the concd. mother liquor gave a ppt. of Na sulfate and sulfite, after the removal of which further evapn. gave a mixt. of inorg. salts and very sol. sulfonation products of PhNH₂; since the mixt. could not be sepd. it was boiled with HCl and on cooling gave o-anilinesulfonic acid as water-sol. hexagonal plates; its Na salt forms water-sol. rhombic hexagonal plates; its structure was confirmed by diazotization and conversion to o-ClC₆H₄SO₃NH₂, m. 187–8° (from EtOH).   G. M. Kosolapoff

KARANDASHEVA, ZH. M.

Sulfonation of P-ClC₆H₅ with 100% H₂SO₄ at 20° over 3

isomer, the p-isomer disappearing completely. The δ-
sulfonic acid is unchanged by 100% H₂SO₄ at 60° but weak
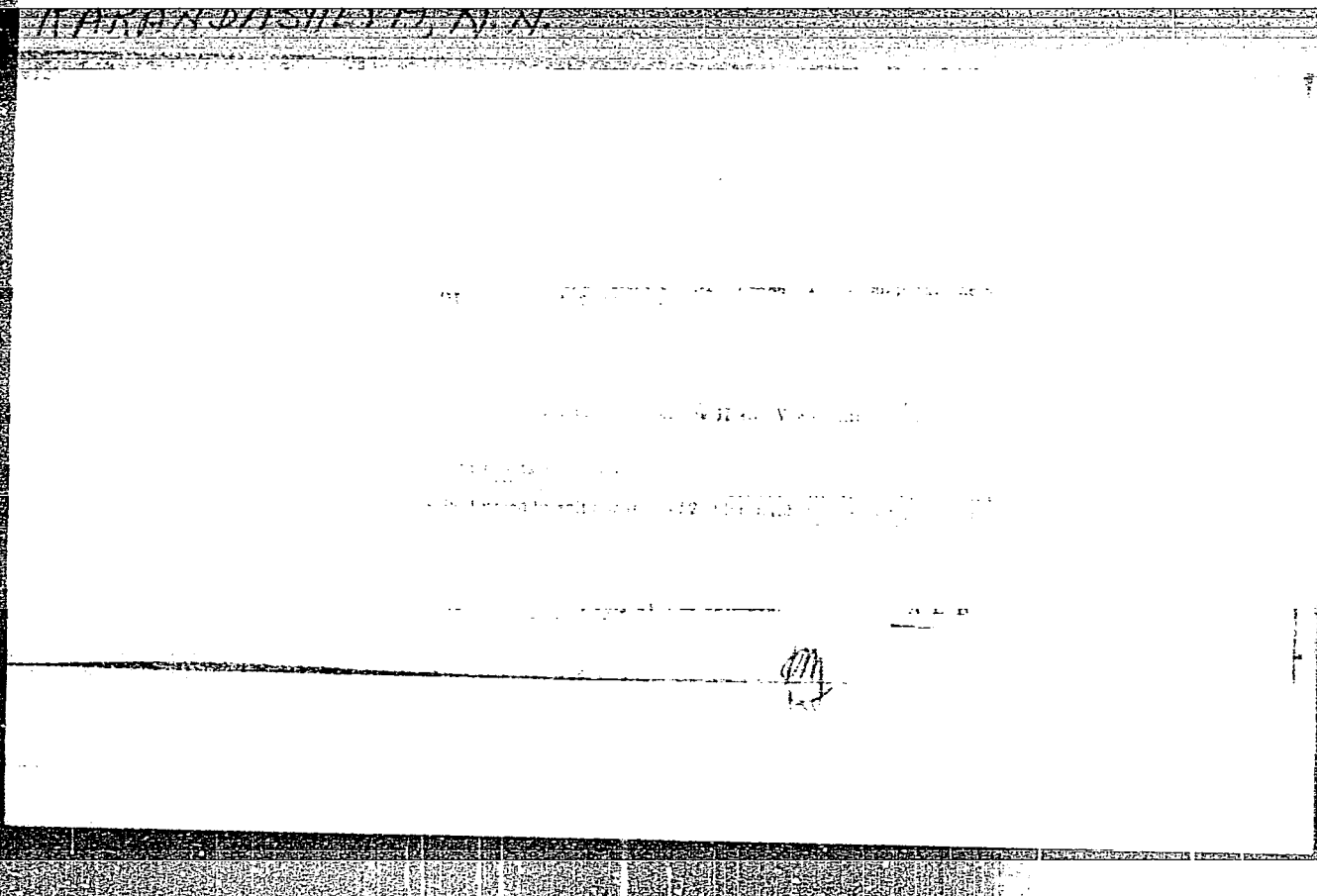
≛ KARANDASHEVA , N·N·

USSR/Organic Chemistry. Synthetic Organic Chemistry.   E-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19160

Author : Vorozhtzov N. N., ml., Karandasheva N. N.
Inst   :
Title   : Sulfonation of 2-Chloronaphthalene. III. Two Step Sul-
           fonation with a Monohydrate and Oleum.

Orig Pub: Zh. obshch. khimiyi, 1956, 26 No 8, 2258-2260

Abstract: At the action of 19% oleum on a sulpho mass obtained by
           the sulphonation of 2-chloronaphthalene (I) with anhy-
           drous H_2SO_4 at 20° as well as at 160°, 2-chloronaph-
           thalene-6,8-disulphonic (II) acid only is formed. The
           mechanism of the reaction is discussed. To 0.72 mole
           H_2SO_4 is added 0.12 mole I and after 3 hours (20°) is
           added 54.1 g. 57.7% oleum; in an hour the mixture is
           poured at 0° into water with ice; after the usual treat-
           ment and crystallization of K-salt and the Chloranhy-

Card   : 1/2

KABANDASHEVA, N.N.

Bisulfite compounds of 4-nitroso-1-naphthol and 1-naphthol. S. V. Bogdanov and N. N. Karandasheva (K. E. ... N. Research Inst. Org. Intermed. & Dyes).

... H$_2$O it gave I and NaHSO$_3$ adduct (II) of 1,4-naphthoquinone dioxime, colorless plates, stable to 9% NaOH in the cold but destroyed by 18% NaOH in 24 hrs.; on acidification its soln. turned yellow and on repeated addn. of NaOH and acid it lost SO$_2$ and yielded I. II (2 g.) in 5 ml. 58.7% NaOH and 25 ml. H$_2$O was briefly refluxed, cooled, and added to 15 ml. 34.4% HCl in 50 ml. H$_2$O, yielding SO$_2$ and 0.88 g. naphthoquinone dioxime, decomp. 217°; di-Ac deriv., m. 167.5-8°. Refluxing 28.3 g. 1-C$_{10}$H$_7$OH, 602 g. 31.6% NaHSO$_3$, and 1-2 ml. MeOH with periodic passage of SO$_2$ 28 hrs. gave on acidification with 200 ml. 34.4% HCl and ... followed by extn. with Et$_2$O ... 1-C$_{10}$H$_7$OH, while the aq. soln. of the bisulfite complex on neutralization with Na$_2$CO$_3$ and concn., gave on addn. of NaCl 86.1-90% bisulfite complex, formulated as 1,2,3,4-tetrahydro-1-oxonaphthalene-3-sulfonate (III), named as the Na salt, which treated with NH$_2$OH.HCl and NaOAc gave in 23 hrs. 94.7% corresponding monoxime, isolated as the Na sulfonate (IV). IV does not lose SO$_2$ in 87% NaOH but

By Grigorev and N. K.
[...] IV Na salt was converted to the Ba salt isolated as the [...] [...] at [...] III and [...] HCl, with NaOAc, gave after 18 hrs 97.1%; the [...] corresponding monosemicarbazone, prisms of trihydrate form [...] isolated; this loses H_2O at 110°; the anhyd. product is very hygroscopic. Thus, I bisulfite complex treated with NH_2OH yields the bisulfite complex of 1,4-naphthoquinone dioxime, which in alkali loses the sulfite group and forms 1,4-naphthoquinone dioxime, while in acid medium it is hydrolyzed to bisulfite complex of [...]   G. M. Kosolapoff

KARANDASHEVA, N.N.

VORONZHTSOV, N.N. mladshiy; KARANDASHEVA, N.N.

Sulfonation of 2-chloronaphthalene. Part 2: Sulfonation at elevated temperature. Zhur. ob. khim. 26 no.8:2255-2257 Ag '56. (MIRA 10:11)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva.
(Naphthalene) (Sulfonation)

VOROZHTSOV, N.N., mladshiy; KARANDASHEVA, N.N.

Sulfonation of 2-chloronaphthalene. Part 3: Two-step sulfonation with monohydrate and oleum. Zhur. ob. khim. 26 no.8:2258-2260 Ag '56.
(MLRA 10:11)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva.
(Naphthalene)   (Sulfonation)

Karandasheva, NN

high temperature. N. N. Vorozhtsov, Jr., and N. N.
Solomina. Gen. Chem. U.S.S.R. 26 ... ... iii. Two-step sulfonation by means
of sulfuric acid and oleum. Ibid. 2525-7.—See C.A. 51,
5018h.
B. M. R.

FOKIN, Ye.P.; KARANDASHEVA, N.N.

Composition of chromium complexes of azo dyes. Zhur. VKHO 5
no. 2:235-236 '60.
(MIRA 14:2)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley imeni K.Ye. Voroshilova.
(Azo dyes)   (Chromium compounds)

TABACHNIKOVA, N.I.; KARANDASHEVA, N.N.

2-Nitronaphthalene-1, 4-disulfonic acid and 2-nitronaphthalene-4-sulfonic acid. Zhur.ob.khim. 31 no.6:1916-1919 Je '61.
(MIRA 14:6)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley imeni K.Ye.Voroshilova.
(Naphthalenedisulfonic acid)   (Naphthalenesulfonic acid)

S/081/60/000/016/004/012
A006/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 16, p. 87, # 64747

AUTHORS: Maydanovskaya, L.G., Karandasheva, R.A., Timofeyeva, N.S., Konstantinova, A.A., Vinokurtseva, I.M.

TITLE: Hydrogen Adsorption on Germanium

PERIODICAL: Uch. zap. Tomskiy un-t, 1959, No. 29, pp. 165-169

TEXT: The hydrogen adsorption on high-dispersion germanium powder was studied in a temperature range from -186 to +300°C within a range of initial pressure of 0.724 - 0.935 mm Hg; and at -186 to +100°C within a range of initial pressure of 0.194 - 0.178 mm Hg. Isobar curves indicate a minimum at -100°C and a maximum at -17°C. The course of the isobar curve obtained by Low (Lou) by other experimental methods and plotted by three experimental points, is confirmed and made more precise. The isobar curve is plotted on the basis of ten experimental points. The values of 1/n in Freundlich's equation are calculated, which vary with changing temperature from 0.59 to 0.81. The authors show the applicabil-

Card 1/2

SALCHINKIN, A.P.; KARANDASHEVA, R.A.; GLADKOVSKAYA, A.A.

Use of ion-exchange resins for the purif'cation of pyromucic
acid. Zhur. prikl. khim. 37 no. 4:917-918 Ap '64.

(MIRA 17:5)

S/191/62/000/008/007/013
B124/B180

AUTHORS: Karandasheva, T. A., Samosatskiy, N. N.

TITLE: Features of low-density polyethylene tube extrusion

PERIODICAL: Plasticheskiye massy, no. 8, 1962, 23-30

TEXT: The BE-40 ("Battenfeld") extruder can produce tubes from low-density
polyethylene with intrinsic viscosity (in decalin) 1.0-2.5. Best
working conditions are given in Table 2. A piston-type apparatus
designed by the NIIKhIMMASh was used for measuring the pressure of the
mass. As, in all polyolefins under continuous stress, creep is greater at
lower intrinsic viscosity, tests must be made to find the best value for
smooth extrusion and good quality production. The degree of stretching
and rate of cooling are the most important factors with tubes. Strength
increases with stretching, specific elongation decreases, and longitudinal
shrinkage increases. Sudden cooling in the nozzle or tank, "freezes" the
high internal stresses, particularly at low temperatures, and makes the
tubes brittle. High grade tubes are best produced from low-density
polyethylene with tensile strength at least 250 kg/cm^2 and minimum elonga-

Card 1/3

Features of low-density ...

tion 250%. During extrusion the stretching should not exceed 10-20%.
The surface of the tube at the outlet end should be maintained at 60°C
cooling gradually to 30°C in the tank. Since low-density polyethylene
is extruded at higher temperatures than high-density, the tubes must be
cooled longer by means of sizing dies and longer cooling tanks. For
uniform cooling throughout the wall a tank with a solid layer of water is
best. Because of the higher viscosity, the feeding capacity of the
extruder must be at least 30% more than for high-density polyethylene,
with corresponding increase in the size of the main assemblies. To avoid
overload, fine filter mesh must not be used nor must extrusion take place
without heating the cylinder. Pure polyethylene is required, and the
counterpressure before the injection head must be achieved by large mesh
filters (e.g., no. 201) or a diaphragm. There are 9 figures and 4 tables.
The most important English-language reference is: R. S. Malluk, J. M. ..
McCelvy, Ind. Eng. Chem. 45, No. 5, 969-993 (1953).

Card 2/3